

GLOBAL BASELINE ASSESSMENT OF COMPLIANCE AND ENFORCEMENT PROGRAMS FOR VEHICLE EMISSIONS AND ENERGY EFFICIENCY

As vehicle pollution and fuel efficiency regulations have become more stringent, the technologies required to mitigate emissions and reduce fuel consumption become increasingly complex. One consequence is that government agencies around the world must improve their compliance and enforcement efforts to ensure that the intended outcomes from emission-control and fuel-efficiency programs are achieved in fact.

This study is the first to take stock of compliance and enforcement (C&E) practices pertaining to emission and efficiency regulations in key vehicle markets. It is based on survey data, in-person interviews, and communications with experts and stakeholders working, as well as in-depth research in the limited published research.

The study assesses C&E activities against a range of criteria:

- » Legislative framework and resources
- » Compliance and vehicle testing campaigns
- » Enforcement and corrective actions
- » Information transparency
- » C&E development vision

In scope it covers 14 major vehicle markets that combined accounted for 87% of global vehicle sales in 2015: Brazil, Canada, Chile, China, France, Germany, India, Japan, Mexico, South Korea, the United

Kingdom, the United States, the European Union, and the U.S. State of California.

C&E practices vary significantly among the vehicle markets studied. Nevertheless, some observations can be made, and certain trends emerge clearly:

- » Not all regulatory agencies have sufficient legal authority to enforce compliance; for example, some agencies lack the authority to mandate recalls and impose financial and other penalties.
- » Budget and resource constraints and uncertainty frequently hamper C&E programs.
- » The most successful C&E programs test vehicles at a number of different stages of their useful life and put the testing burden on manufacturers.
- » The penalty to manufacturers for noncompliance varies significantly across regions.
- » In many instances, C&E programs lack transparency, making public monitoring and oversight difficult or impossible and undermining public confidence.
- » C&E activities in most regions focus more on compliance with emission standards than with greenhouse gas emission and fuel consumption standards.
- » Policymakers generally consider compliance and enforcement efforts crucial to effective regulation of vehicle pollution and energy efficiency, and also acknowledge that existing C&E programs are inadequate.

SUMMARY OVERVIEW OF COMPLIANCE AND ENFORCEMENT PROGRAMS IN MAJOR VEHICLE MARKETS

Canada:

- ✓ Strong collaboration with the U.S. program to leverage resources, while still maintaining a domestic testing program.
- ✗ Program lacks a sustainable funding mechanism and has limited data transparency.

EU, France, Germany, UK:

- ✓ Close to finalizing a new regulation to improve the existing compliance framework. In-use vehicle testing appears to be increasing.
- ✗ Currently no centralized enforcement authority and significant conflicts of interest exist. Vehicle testing programs are not currently sustainable.

China:

- ✓ Recent changes have strengthened compliance and testing requirements as well as the government's enforcement power.
- ✗ Lack of compliance and enforcement for fuel efficiency standards.

U.S. and California:

- ✓ Heavy focus on in-use vehicle testing, sustainable funding mechanism as well as long history of recalls and other corrective actions.
- ✗ C&E program has limited and inconsistent data transparency.

Korea:

- ✓ Recent improvements to the regulation to strengthen the in-use vehicle testing program.
- ✗ C&E program has limited transparency.

Mexico:

- ✓ Able to leverage the U.S. program to save resources.
- ✗ Lack of a truly meaningful C&E program, with little agency capacity or ability to conduct enforcement activities.

Japan:

- ✓ Strong legislative support and governmental authority. History of corrective methods for noncompliance.
- ✗ C&E program has very limited transparency.

Brazil:

- ✓ Follows the basic regulatory structure of the EU.
- ✗ Lack of boosted compliance protocol, regulatory capacity, and independent testing.

Chile:

- ✓ Strong technical capacity with advanced government-run testing facilities.
- ✗ Lack of strong legislative authority for enforcement. Lack of required resources to conduct adequate amount of compliance activities.

India:

- ✓ Has in place a basic testing system to check for compliance. Recent regulations have led to slightly improved data transparency.
- ✗ Lack of strong enforcement authority. Conflicts of interest due to financial links between manufacturers and government testing facilities.

EVALUATION OF BEST PRACTICES FOR COMPLIANCE AND ENFORCEMENT PROGRAMS IN MAJOR VEHICLE MARKETS

Region/country		Best Practices						
		Establish clear legal authority	Avoid conflicts of interest	Obtain the necessary resources	Conduct reliable testing and checks at all stages of production and use	Use corrective actions	Prioritize data and information transparency	Create a roadmap for program development
Asia	China	●++	●+	●+	●++	●+	●	●+
	India	●+	●+	●+	●+	●	●	●+
	Japan	●++	●++	●+	●++	●++	●	●+
	South Korea	●++	●++	●++	●++	●++	●+	●+
Europe	EU	●	●+	●+	●	●+	●	●+
	France	●+	●	●+	●+	●+	●	●+
	Germany	●+	●	●+	●+	●+	●	●+
	UK	●+	●	●+	●+	●+	●+	●+
North America	California	●++	●++	●++	●++	●++	●+	●+
	Canada	●+	●++	●+	●++	●	●	●+
	Mexico	●+	●+	●	●	●	●	●
	U.S.	●++	●++	●++	●++	●++	●+	●+
South America	Brazil	●++	●+	●+	●	●+	●	●
	Chile	●+	●+	●+	●+	●	●+	●+

● The country does not sufficiently meet any criteria for this practice.

●+ The country meets some criteria for this practice.

●++ The country meets all criteria for this practice.

PUBLICATION INFORMATION

Global baseline assessment of compliance and enforcement programs for vehicle emissions and energy efficiency

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DOWNLOAD

theicct.org/publications/compliance-and-enforcement-global-baseline

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